F1 conclude

R^1 is NH_2- or an amino acid sequence X^3-X^4-X^5

wherein X^3 is an aliphatic amino acid residue having a side chain hydroxyl group and X^4 and X^5 are the same or different and are any amino acid residue and wherein R^2 is a sequence of 1 to 3 amino acid residues which are the same or different and are selected from the group consisting of glycine, sarcosine, azetidine, nipecotic acid and pipecotic acid.

F2

3. (Twice Amended) The peptide of claim 1 wherein at least one amino acid is a D-amino acid.

F3

13. (Twice Amended) A method for treating or preventing systemic inflammatory response syndrome (SIRS) in a mammal comprising administering to the mammal an effective amount of a peptide of the formula: $R^1 - X^1 - X^2 - R^2$

wherein X^1 is an aromatic amino acid residue;

X^2 is any amino acid residue; and

R^1 is NH_2- or an amino acid sequence $X^3 - X^4 - X^5$

wherein X^3 is an aliphatic amino acid residue having a side chain hydroxyl group and X^4 and X^5 are the same or different and are any amino acid residue and wherein R^2 is a sequence of 1 to 3 amino acid residues which are the same or different and are aliphatic amino acid residues or of an effective fragment or derivative of said peptide.

14. (Twice Amended) A method for treating or preventing anaphylactic hypotension in a mammal comprising administering to the mammal an effective amount of a peptide of the formula: $R^1 - X^1 - X^2 - R^2$

wherein X^1 is an aromatic amino acid residue;

X^2 is any amino acid residue; and

R^1 is NH_2- or an amino acid sequence $X^3 - X^4 - X^5$

wherein X^3 is an aliphatic amino acid residue having a side chain hydroxyl group and X^4 and X^5 are the same or different and are any amino acid residue and wherein R^2 is a sequence of 1 to 3 amino acid residues which are the same or different and are aliphatic amino acid residues or of an effective fragment or derivative of said peptide.

15. (Twice Amended) A method of reducing or preventing an anaphylactic reaction in a mammal comprising administering an effective amount of a peptide of the formula: $R^1 - X^1 - X^2 - R^2$

wherein X^1 is an aromatic amino acid residue;

X^2 is any amino acid residue; and

R^1 is NH_2- or an amino acid sequence $X^3 - X^4 - X^5$

wherein X^3 is an aliphatic amino acid residue having a side chain hydroxyl group and X^4 and X^5 are the same or different and are any amino acid residue and wherein R^2 is a sequence of 1 to 3 amino acid residues which are the same or different and are aliphatic

~~amino acid residues or of an effective fragment or derivative of said peptide to the mammal.~~

25. (Amended) A method for treating or preventing systemic inflammatory response syndrome (SIRS) in a mammal comprising administering to the mammal an effective amount of the peptide of claim 11 of an effective fragment or derivative of said peptide.

Please add new claims 38-89 as follows:

--38. The peptide of claim 7 wherein X^1 is phenyl alanine.

39. The method of claim 13 wherein

X^1 is phenyl alanine;

X^2 is Glu or Ala;

R^2 is Gly-Gly; and

R^1 is $X^3 - X^4 - X^5$ wherein

X^3 is Thr, X^4 is Asp or Ala and

X^5 is Ile or Ala.

40. The method of claim 13 wherein the peptide is selected from the group consisting of:

(a) Thr-Asp-Ile-Phe-Glu-Gly-Gly (Sequence ID NO:8);

(b) Thr-Ala-Ile-Phe-Glu-Gly-Gly (Sequence ID NO:3);

(c) Thr-Asp-Ala-Phe-Glu-Gly-Gly (Sequence ID NO:4);

(d) Thr-Asp-Ile-Phe-Ala-Gly-Gly (Sequence ID NO:6);

F5 Cont.

(e) Phe-Glu-Gly-Gly-Gly (Sequence ID NO:9);

(f) Phe-Glu-Gly-Gly (Sequence ID NO:11);

(g) Phe-Ala-Gly-Gly-Gly (Sequence ID NO:12); and

(h) Phe-Glu-Sarcosine.

41. The method of claim 13 wherein R^2 is a sequence of 1 to 3 amino acid residues which are the same or different and are selected from the group consisting of glycine, sarcosine, azetidine, nipecotic acid and pipecotic acid.

42. The method of claim 13 wherein at least one amino acid of said peptide is a D-amino acid.

43. The method of claim 13 wherein the peptide is Phe-Glu-Gly .

44. The method of claim 13 wherein the peptide is an effective derivative of the peptide Phe-Glu-Gly.

45. The method of claim 42 wherein the peptide is DPhe-DGlu-Gly.

46. The method of claim 42 wherein the peptide is an effective derivative of the peptide DPhe-DGlu-Gly.

47. The method of claim 13 wherein SIRS is associated with SIRS-induced hypotension.

48. The method of claim 13 wherein SIRS is associated with SIRS-induced shock.

49. The method of claim 13 wherein SIRS is associated with a condition selected from the group consisting of an infection, pancreatitis, burns, a cerebral injury, a spinal injury, ischaemia, multiple trauma, hemorrhagic shock, and immune-mediated organ dysfunction.

50. The method of claim 14 wherein

X^1 is phenyl alanine;

X^2 is Glu or Ala;

R^2 is Gly-Gly; and

R^1 is $X^3 - X^4 - X^5$ wherein

X^3 is Thr, X^4 is Asp or Ala and

~~X^5 is Ile or Ala.~~

~~51.~~ The method of claim ~~14~~ wherein the peptide is selected from the group consisting of:

(a) Thr-Asp-Ile-Phe-Glu-Gly-Gly (Sequence ID NO:8);

(b) Thr-Ala-Ile-Phe-Glu-Gly-Gly (Sequence ID NO:3);

(c) Thr-Asp-Ala-Phe-Glu-Gly-Gly (Sequence ID NO:4);

(d) Thr-Asp-Ile-Phe-Ala-Gly-Gly (Sequence ID NO:6);

(e) Phe-Glu-Gly-Gly-Gly (Sequence ID NO:9);

(f) Phe-Glu-Gly-Gly (Sequence ID NO:11);

(g) Phe-Ala-Gly-Gly-Gly (Sequence ID NO:12); and

(h) Phe-Glu-Sarcosine.

52. The method of claim 14 wherein R^2 is a sequence of ~~1 to 3 amino~~ acid residues which are the ~~same or different~~ and are selected from the group consisting of glycine, sarcosine, azetidine, nipecotic acid and pipecotic acid.

~~53.~~ The method of claim ~~14~~ wherein at least one amino acid of said peptide is a D-amino acid.

~~54.~~ The method of claim ~~14~~ wherein the peptide is Phe-Glu-Gly.

13 11
55. The method of claim 53 wherein the peptide is DPhe-DGlu-Gly.

Sub. G5 F5 cont.

56. The method of claim 15 wherein

X^1 is phenyl alanine;

X^2 is Glu or Ala;

R^2 is Gly-Gly; and

R^1 is $X^3 - X^4 - X^5$ wherein

X^3 is Thr, X^4 is Asp or Ala and

X^5 is Ile or Ala.

16 6
57. The method of claim 15 wherein the peptide is selected from the group consisting of:

(a) Thr-Asp-Ile-Phe-Glu-Gly-Gly (Sequence ID NO:8);

(b) Thr-Ala-Ile-Phe-Glu-Gly-Gly (Sequence ID NO:3);

(c) Thr-Asp-Ala-Phe-Glu-Gly-Gly (Sequence ID NO:4);

(d) Thr-Asp-Ile-Phe-Ala-Gly-Gly (Sequence ID NO:6);

(e) Phe-Glu-Gly-Gly-Gly (Sequence ID NO:9);

(f) Phe-Glu-Gly-Gly (Sequence ID NO:11);

(g) Phe-Ala-Gly-Gly-Gly (Sequence ID NO:12); and

(h) Phe-Glu-Sarcosine.

58. The method of claim 15 wherein R^2 is a sequence of 1 to 3 ~~amino acid~~ residues which are the same or ~~different and~~ are selected from the group consisting of glycine, ~~sarcosine~~, azetidine, nipecotic acid and pipecotic acid.

~~59.~~ The method of claim ~~15~~ wherein at least one amino acid of said peptide is a D-amino acid.

~~60.~~ The method of claim ~~15~~ wherein the peptide is Phe-Glu-Gly.

~~61.~~ The method of claim ~~59~~ wherein the peptide is DPhe-DGlu-Gly.

~~62.~~ The method of claim ~~15~~ wherein the anaphylactic reaction is associated with a disorder selected from the group consisting of asthma, rhinitis, urticaria and eczema.

~~63.~~ The method of claim ~~15~~ wherein the anaphylactic reaction is in response to a food allergen.

64. A method for reducing or preventing an inflammatory reaction in a mammal comprising administering to the mammal a peptide of the formula: $R^1 - X^1 - X^2 - R^2$

wherein X^1 is an aromatic amino acid residue;

X^2 is any amino acid residue; and

R^1 is NH_2- or an amino acid sequence $X^3 - X^4 - X^5$

wherein X^3 is an aliphatic amino acid residue having a side chain hydroxyl group and X^4 and X^5 are the same or different and are any amino acid residue and wherein R^2 is a sequence of 1 to 3 amino acid residues which are the same or different and are aliphatic amino acid residues, or of an effective fragment or derivative of said peptide.

65. The method of claim 64 wherein

X^1 is phenyl alanine;

X^2 is Glu or Ala; and

R^2 is Gly-Gly;

R^1 is X^3-X^4-X^5 wherein X^3 is Thr, X^4 is Asp or Ala and X^5 is Ile or Ala.

66. The method of claim 64 wherein the peptide is selected from the group consisting of:

(a) Thr-Asp-Ile-Phe-Glu-Gly-Gly (Sequence ID NO:8);

(b) Thr-Ala-Ile-Phe-Glu-Gly-Gly (Sequence ID NO:3);

(c) Thr-Asp-Ala-Phe-Glu-Gly-Gly (Sequence ID NO:4);

(d) Thr-Asp-Ile-Phe-Ala-Gly-Gly (Sequence ID NO:6);

(e) Phe-Glu-Gly-Gly-Gly (Sequence ID NO:9);

(f) Phe-Glu-Gly-Gly;

(g) Phe-Glu-Sarcosine;

(h) Phe-Glu-Gly; and

(i) Phe-Glu-Gly wherein Phe and Glu are D amino acids, or an effective fragment or derivative of said peptide.

67. The method of claim 64 wherein R^2 is a sequence of 1 to 3 amino acid residues which are the same or different and are selected from the group consisting of glycine, sarcosine, azetidine, nipecotic acid and pipecotic acid.

FS Cont.

68. The method of claim 64 wherein at least one amino acid is a D-amino acid.

69. The method of claim 64 wherein the peptide is Phe-Glu-Gly.

70. The method of claim 68 wherein the peptide is DPhe-DGlu-Gly.

71. The method of claim 64 wherein the inflammatory reaction is associated with a disorder selected from the group consisting of a rheumatic disease, inflammatory bowel disease and a post-ischemic lesion subsequent to a stroke or a cardiac infarct.

72. A method for reducing or preventing an endotoxic reaction in a mammal comprising administering to the mammal an effective amount of a peptide of the formula:

$R^1 - X^1 - X^2 - R^2$

wherein X^1 is an aromatic amino acid residue;

X^2 is any amino acid residue; and

R^1 is NH_2- or an amino acid sequence X^3 - X^4 - X^5

wherein X^3 is an aliphatic amino acid residue having a side chain hydroxyl group and X^4 and X^5 are the same or different and are any amino acid residue and wherein R^2 is a sequence of 1 to 3 amino acid residues which are the same or different and are aliphatic amino acid residues, or of an effective fragment or derivative of said peptide.

F5 Cont.

73. The method of claim 72 wherein

X^1 is phenyl alanine;

X^2 is Glu or Ala; and

R^2 is Gly-Gly;

R^1 is X^3-X^4-X^5 wherein X^3 is Thr, X^4 is Asp or Ala and X^5 is Ile or Ala.

74. The method of claim 72 wherein the peptide is selected from the group consisting of:

(a) Thr-Asp-Ile-Phe-Glu-Gly-Gly (Sequence ID NO:8);

(b) Thr-Ala-Ile-Phe-Glu-Gly-Gly (Sequence ID NO:3);

(c) Thr-Asp-Ala-Phe-Glu-Gly-Gly (Sequence ID NO:4);

(d) Thr-Asp-Ile-Phe-Ala-Gly-Gly (Sequence ID NO:6);

(e) Phe-Glu-Gly-Gly-Gly (Sequence ID NO:9);

(f) Phe-Glu-Gly-Gly;

(g) Phe-Glu-Sarcosine;

(h) Phe-Glu-Gly; and

(i) Phe-Glu-Gly wherein Phe and Glu are D amino acids, or an effective fragment or derivative of said peptide.

75. The method of claim 72 wherein R^2 is a sequence of 1 to 3 amino acid residues which are the same or different and are selected from the group consisting of glycine, sarcosine, azetidine, nipecotic acid and pipecotic acid.

F5 Cont.

76. The method of claim 72 wherein at least one amino acid is a D-amino acid.

77. The method of claim 72 wherein the peptide is Phe-Glu-Gly.

78. The method of claim 76 wherein the peptide is DPhe-DGlu-Gly.

79. A method for reducing neutrophil function in a mammal comprising administering to the mammal a peptide of the formula: $R^1 - X^1 - X^2 - R^2$

wherein X^1 is an aromatic amino acid residue;

X^2 is any amino acid residue; and

R^1 is NH_2- or an amino acid sequence $X^3 - X^4 - X^5$

wherein X^3 is an aliphatic amino acid residue having a side chain hydroxyl group and X^4 and X^5 are the same or different and are any amino acid residue and wherein R^2 is a sequence of 1 to 3 amino acid residues which are the same or different and are aliphatic amino acid residues, or of an effective fragment or derivative of said peptide.

80. The method of claim 79 wherein

X^1 is phenyl alanine;

X^2 is Glu or Ala; and

R^2 is Gly-Gly;

R^1 is X^3-X^4-X^5 wherein X^3 is Thr, X^4 is Asp or Ala and X^5 is Ile or Ala.

81. The method of claim 79 wherein the peptide is selected from the group consisting of:

(a) Thr-Asp-Ile-Phe-Glu-Gly-Gly (Sequence ID NO:8);

(b) Thr-Ala-Ile-Phe-Glu-Gly-Gly (Sequence ID NO:3);

(c) Thr-Asp-Ala-Phe-Glu-Gly-Gly (Sequence ID NO:4);

(d) Thr-Asp-Ile-Phe-Ala-Gly-Gly (Sequence ID NO:6);

(e) Phe-Glu-Gly-Gly-Gly (Sequence ID NO:9);

(f) Phe-Glu-Gly-Gly;

(g) Phe-Glu-Sarcosine;

(h) Phe-Glu-Gly; and

(i) Phe-Glu-Gly wherein Phe and Glu are D amino acids, or an effective fragment or derivative of said peptide.

82. The method of claim 79 wherein R^2 is a sequence of 1 to 3 amino acid residues which are the same or different and are selected from the group consisting of glycine, sarcosine, azetidine, nipecotic acid and pipecotic acid.

FS Cont.

83. The method of claim 79 wherein at least one amino acid is a D-amino acid.

84. The method of claim 79 wherein the peptide is Phe-Glu-Gly.

85. The method of claim 83 wherein the peptide is DPhe-DGlu-Gly.

86. The method of claim 79 wherein the infiltration of neutrophils into an inflammatory site in the mammal is reduced or prevented.

87. The method of claim 79 wherein the mammal suffers from a disorder selected from the group consisting of a rheumatic disease, inflammatory bowel disease and a post-ischemic lesion subsequent to a stroke or a cardiac infarct.

88. An antibody which specifically recognizes an epitope of a peptide of the formula: $R^1 - X^1 - X^2 - R^2$

wherein X^1 is an aromatic amino acid residue;

X^2 is any amino acid residue; and

R^1 is NH_2- or an amino acid sequence $X^3 - X^4 - X^5$

wherein X^3 is an aliphatic amino acid residue having a side chain hydroxyl group and X^4 and X^5 are the same or different and are any amino acid residue and wherein R^2 is a sequence of 1 to 3 amino acid residues which are the same or different and are aliphatic amino acid residues, or of an effective fragment or derivative of said peptide.

89. A method of determining the peptide SGP-T or the peptide SGPS in a biological fluid comprising obtaining a sample of the biological fluid and determining the peptide in the fluid by immunoassay employing an antibody in accordance with claim 88.